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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/624,798	07/24/2000	Paul C Coffin	10001664-1	6517
22879	7590	10/14/2003	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			WATKO, JULIE ANNE	
		ART UNIT		PAPER NUMBER
		2652		
DATE MAILED: 10/14/2003				15

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/624,798	COFFIN ET AL.
Examiner	Art Unit	
Julie Anne Watko	2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) Responsive to communication(s) filed on 08 July 2003.

2a) This action is **FINAL**.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) Claim(s) 1-6 and 10-20 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-6 and 10-20 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some \* c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ .
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .	6) <input type="checkbox"/> Other: _____ .

**DETAILED ACTION*****Claim Rejections - 35 USC § 103***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-6 and 10-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Menke et al (US Pat. No. 5841744).

As recited in claim 1, Menke et al show a reconfigurable cartridge processing module for use in a data storage system, comprising: a frame, said frame having a lower plate and an upper plate positioned in generally parallel, spaced-apart relation, said lower and upper plates of said frame having a plurality of sets of mounting locations provided thereon so that said frame defines a first component configuration (see Fig. 21) and a second component configuration (see Fig. 20), the first component configuration comprising: a first cartridge receiving device 5 mounted to a first set of the plurality of sets of mounting locations provided on said frame so that said first cartridge receiving device is located at a first position within said frame; and a second cartridge receiving

device 5 mounted to a second set of the plurality of sets of mounting locations provided on said frame so that said second cartridge receiving device is located at a second position within said frame, said first and second cartridge receiving devices together occupying a volumetric space within said frame, wherein said first and second cartridge receiving devices are located substantially between the upper and lower plates of said frame when said frame is in the first component configuration; the second component configuration comprising a third cartridge receiving device 4 mounted to a third set of the plurality of sets of mounting locations provided on said frame, wherein said third cartridge receiving device is located substantially between the upper and lower plates of said frame when said frame is in the second component configuration.

Menke et al do not explicitly show (under a **closed interpretation**) replacing 2 devices with a single device, such that substantially the same space (and substantially no additional space) is occupied by the single device as was occupied by said 2 devices.

Menke et al show replacing 3 devices with a single device, such that substantially the same space (and substantially no additional space) is occupied by the single device as was occupied by said 3 devices (see Figs. 21 and 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrive at the claimed number of replaced parts in the course of routine experimentation and optimization as is notoriously well known in the art. The rationale is as follows: one of ordinary skill in the art would have been motivated to arrive at the claimed number of replaced parts in the course of routine experimentation and optimization in order to achieve flexibility in storage apparatus configuration so as to

enhance functionality and to adapt to changing host system requirements as is notoriously well known in the art (see also arguments below).

Due to similarity of claimed subject matter, claims 10, 14 and 20 are treated together. Read “means” for “device” where appropriate for claim 14. The method of claim 20 is not patentably distinct from claims 10 and 14.

As recited in claims 10, 14 and 20, Menke et al show, in addition to the above teachings (see especially teachings above regarding claim 1), the second position being located adjacent the first position so that said second cartridge receiving device is located alongside said first cartridge receiving device (see teaching above for claim 6), said third cartridge receiving device in said second component configuration substantially replacing said first and second cartridge receiving devices in said first component configuration (see open interpretation above for claim 1).

As recited in claims 10, 14 and 20, Menke et al do not explicitly show **vice-versa**, that a volumetric space occupied by said third cartridge receiving device in said second component configuration is substantially occupied by said first and second cartridge receiving devices in said first component configuration.

Although Menke et al are silent regarding a single device substantially replacing 2 devices with substantially identical occupied space, Menke et al explicitly show a single device 4 substantially replacing 3 devices with substantially identical occupied space.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to arrive at the claimed number of replaced parts in the course of routine experimentation and optimization as is notoriously well known in the art. The rationale is as follows: one of ordinary skill in the art would have been motivated to

arrive at the claimed number of replaced parts in the course of routine experimentation and optimization in order to achieve flexibility in storage apparatus configuration so as to enhance functionality and to adapt to changing host system requirements as is notoriously well known in the art (see also arguments below).

As recited in claims 2 and 11, Menke et al show that said first cartridge receiving device comprises a cartridge 7 read/write device 5.

As recited in claims 2 and 11, Menke et al are silent regarding a half-width dimension.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a half-width cartridge read/write device in the module of Menke et al. The rationale is as follows: one of ordinary skill in the art would have been motivated to arrive at the claimed dimensions through the process of routine experimentation and optimization in the absence of criticality *Gardner v. TEC systems, Inc.*, 220 USPQ 777 (Fed. Cir. 1984) as is notoriously well known in the art (see also arguments below).

Furthermore, absent a showing of criticality (i.e., unobvious or unexpected results), the dimensions set forth in claims 2 and 11 are considered to be within the level of ordinary skill in the art.

Moreover, the instant disclosure does not set forth evidence ascribing unexpected results due to the claimed dimensions. See *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338 (Fed. Cir. 1984), which held that the dimensional limitations failed to point out a feature which performed and operated any differently from the prior art.

As recited in claims 3, 12 and 18, Menke et al are silent regarding whether said second cartridge receiving device comprises a cartridge storage magazine.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a cartridge storage magazine as a second device in the module of Menke et al as is notoriously well known in the art. The rationale is as follows: one of ordinary skill in the art would have been motivated to use a cartridge storage magazine as a second device in order to increase a storage capacity of the module as is notoriously well known in the art (see also arguments below).

As recited in claims 4, 13 and 19, Menke et al are silent regarding whether said third cartridge receiving device comprises a full-width cartridge read/write device.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a full-width cartridge read/write device as a third device in the module of Menke et al as is notoriously well known in the art. The rationale is as follows: one of ordinary skill in the art would have been motivated to use a full-width cartridge read/write device as a third device in order to increase a reproduction rate of the module as is notoriously well known in the art (see also arguments below).

As recited in claim 5, Menke et al show that the second position (in which 5 is located in Fig. 21) is located adjacent the first position (in which 5 is located in Fig. 21) so that said second cartridge receiving device is located adjacent said first cartridge receiving device when said frame is in the first component configuration (see adjacent drives 5 in Fig. 21).

As recited in claim 6, Menke et al show that the second position is located alongside (see Fig. 21, rotated if necessary) the first position so that said second cartridge

receiving device is located alongside said first cartridge receiving device when said frame is in the first component configuration.

Regarding claim 15: See teaching above for claim 5.

Regarding claim 16: See teaching above for claim 6.

As recited in claim 17, Menke et al show that said first cartridge receiving means comprises cartridge read/write means 5 for reading data from and writing data to said at least one data cartridge 7.

#### ***Response to Arguments***

3. Applicant's arguments filed July 8, 2003, have been fully considered but they are not persuasive.

On page 2, last paragraph, Applicant states that the "open interpretation" of paper no. 13, mailed May 5, 2003, is "unreasonably broad". The Examiner accepts this statement as an admission that the "closed interpretation" of paper no. 13, mailed May 5, 2003, is reasonable.

On pages 4-5, Applicant argues that arrival at the claimed number of replacement parts (two as opposed to three) would not have been within the level of ordinary skill in the art due to lack of motivation. The Examiner has considered this argument thoroughly and asserts that the number two was within the level of ordinary skill in the art at the time the invention was made. As evidence, the Examiner presents Dankman et al (US Pat. No. 5491609). Dankman et al teach that, because of a need to "provide a great deal of **flexibility** to users", it is desirable for computers to "provide the capability to change their configuration by simply sliding an external module of **any size**, for example, a CD-ROM module ... into an external docking bay on a computer that transforms the

computer (with the added module) into a new system with enhanced functionality" (see col. 2, lines 14-21, emphasis added). Dankman et al also teach replacing **2** devices by a single device having a width equal to the sum of the widths of the 2 replaced devices (see col. 6, lines 10-22, in which 2 devices with widths  $W$  and  $2W$ , are replaced by a device with width  $3W$ ). Additionally, Dankman et al teach replacing **3** devices by a single device having a width equal to the sum of the widths of the 3 replaced devices (see col. 6, lines 5-48, in which "three modules of similar sizes" are replaced by "a single module that is three times the width"). Thus, it is clear that a person of ordinary skill in the art would have understood that the scope of intellectual property rendered obvious by Menke et al is not limited to the particular configurations depicted (e.g., replacing 3 cartridge receiving devices with one cartridge receiving device occupying substantially the same space as said 3 cartridge receiving devices); rather, the Menke et al setup could be used with any arbitrary choice of the number of replaced units, as taught by Dankman et al (see Dankman et al col. 6, lines 20-22, "Other modular configurations will be apparent to those skilled in the art."; see also Dankman et al col. 4, lines 56-57, "Other embodiments may include more or fewer docking bays."), without exceeding the level of ordinary skill in the art.

The fact that a person of ordinary skill in the art would have been motivated to change a number and/or a size of replaced parts in order to achieve flexibility has already been established in the record and will not be repeated. See paper no. 13, pages 9-10.

***Conclusion***

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. The Examiner has consulted a translator regarding Menke (WO 95/07531), cited in paper no. 13, mailed May 5, 2003. It is noted that on page 9, first full paragraph, the WO 95/07531 reference teaches that, for a tower 3 of driving assemblies 2, a space requirement of tower 3 coincides practically with a space requirement of magazine 4, such that a compact design is produced.

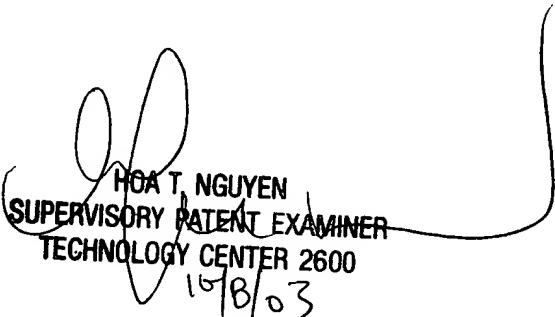
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Anne Watko whose telephone number is (703) 305-7742. The examiner can normally be reached on Mon&Tue until 2PM, Th until 5PM, Wed&Fri all day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T. Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Julie Anne Watko  
Examiner  
Art Unit 2652

October 9, 2003  
JAW

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10/8/03